

Amendment No. 137

Assembly Amendment to Assembly Bill No. 163	(BDR 48-798)
<b>Proposed by:</b> Assembly Committee on Natural Resources, Agriculture, and Mining	
<b>Amends:</b> Summary: No Title: No Preamble: No Joint Sponsorship: No Digest: Yes	

ASSEMBLY ACTION			Initial and Date	SENATE ACTION			Initial and Date		
Adopted	<input type="checkbox"/>	Lost	<input type="checkbox"/>	_____	Adopted	<input type="checkbox"/>	Lost	<input type="checkbox"/>	_____
Concurred In	<input type="checkbox"/>	Not	<input type="checkbox"/>	_____	Concurred In	<input type="checkbox"/>	Not	<input type="checkbox"/>	_____
Receded	<input type="checkbox"/>	Not	<input type="checkbox"/>	_____	Receded	<input type="checkbox"/>	Not	<input type="checkbox"/>	_____

EXPLANATION: Matter in (1) *blue bold italics* is new language in the original bill; (2) variations of green bold underlining is language proposed to be added in this amendment; (3) ~~red strikethrough~~ is deleted language in the original bill; (4) ~~purple double strikethrough~~ is language proposed to be deleted in this amendment; (5) orange double underlining is deleted language in the original bill proposed to be retained in this amendment.





ASSEMBLY BILL NO. 163—ASSEMBLYMEN WATTS;  
COHEN, NGUYEN, PETERS AND SWANK

FEBRUARY 15, 2019

JOINT SPONSORS: SENATORS BROOKS;  
AND SCHEIBLE

Referred to Committee on Natural Resources,  
Agriculture, and Mining

SUMMARY—Revises provisions governing water conservation. (BDR 48-798)

FISCAL NOTE: Effect on Local Government: May have Fiscal Impact.  
Effect on the State: Yes.

~

EXPLANATION – Matter in *bolded italics* is new; matter between brackets ~~omitted material~~ is material to be omitted.

AN ACT relating to water; revising certain requirements relating to a plan of water conservation; revising minimum standards for plumbing fixtures in new construction and expansions and renovations in certain structures; and providing other matters properly relating thereto.

**Legislative Counsel’s Digest:**

1 Existing law requires each supplier of water **and each public utility** to adopt a plan of  
2 water conservation, which must be submitted to the Water Planning Section of the Division of  
3 Water Resources of the State Department of Conservation and Natural Resources ~~or the~~  
4 **Public Utilities Commission of Nevada, as applicable**. The plan of water conservation must  
5 also be updated and submitted to the Section ~~or Commission, as applicable~~ every 5 years.  
6 (NRS 540.131, 540.141 ~~or Section~~ , ~~704.662, 704.6622~~ **Sections 1 and 8** of this bill  
7 ~~requires~~ **require** each supplier of water **and public utility: (1) who serves 3,300 persons or**  
8 **more** to submit the results of a water loss audit with the plan of water conservation or update  
9 to the plan ~~or~~ **; and (2) who serves less than 3,300 persons to submit the results of certain**  
10 **calculations regarding water delivered and water billed with the plan of water**  
11 **conservation or update to the plan**. Once a supplier ~~or public utility~~ has submitted the  
12 results of a water loss audit, ~~section~~ **sections 1** ~~requires~~ **and 8 require** the supplier of  
13 water **or public utility** to submit with any future update to the plan of water conservation: (1)  
14 a comparison between the results of the most recent audit ~~or calculations~~ and the audit ~~or~~  
15 **calculations** previously submitted; and (2) an analysis of any progress made towards certain  
16 goals which must be established in the plan of water conservation for water ~~leakage. Section~~  
17 **loss. Sections 3 and 9** of this bill ~~revises~~ **revise** the provisions which must be included in a  
18 plan or a joint plan of water conservation to include establishing goals for acceptable levels of  
19 water ~~leakage~~ **loss**.

20 Existing law establishes certain minimum standards for plumbing fixtures in new  
21 construction, expansions and renovations in residential, commercial or industrial structures,  
22 certain public buildings financed by a public body, manufactured buildings and homes and  
23 mobile homes. (NRS 278.582, 338.193, 461.175, 489.706) **Sections 4-7** of this bill revise  
24 these requirements to instead require that new construction, expansions and renovations on

25 these structures must install toilets, shower apparatuses, faucets and urinals that have been  
 26 certified under the WaterSense program established by the United States Environmental  
 27 Protection Agency. Sections 4-7 exempt from these requirements any residential,  
 28 commercial or industrial structure and public building financed by a public body that  
 29 was constructed 50 years or more before the current year.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN  
 SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

1 **Section 1.** Chapter 540 of NRS is hereby amended by adding thereto a new  
 2 section to read as follows:

3 1. ~~Each~~ Except as otherwise provided in subsection 4, each supplier of  
 4 water ~~who~~ that is required to adopt or update a plan of water conservation in  
 5 accordance with the provisions of NRS 540.131 and:

6 (a) Serves 3,300 persons or more must conduct a water loss audit in  
 7 accordance with the methodology and software of the American Water Works  
 8 Association for water loss auditing. The results of the water loss audit must be  
 9 submitted by the supplier of water to the Section with the plan of water  
 10 conservation or update to the plan of water conservation, as applicable.

11 (b) Serves less than 3,300 persons must calculate the amount of water  
 12 delivered by the supplier of water and the amount of water that was billed to  
 13 customers of the supplier of water for each year. The calculations must be  
 14 submitted by the supplier of water to the Section with the plan for water  
 15 conservation or update to the plan of water conservation, as applicable.

16 2. If the supplier of water has previously submitted the results of a water  
 17 loss audit to the Section pursuant to paragraph (a) of subsection 1, and is  
 18 submitting an update to the plan of water conservation, the supplier must also  
 19 submit to the Section:

20 (a) A comparison between the results of the new water loss audit and the  
 21 previous water loss audit; and

22 (b) An analysis of any progress made by the supplier towards the goals for  
 23 acceptable water ~~leakage~~ loss established in the plan for water conservation  
 24 pursuant to paragraph (c) of subsection 1 of NRS 540.141.

25 3. If the supplier of water has previously submitted the results of the  
 26 calculations conducted pursuant to paragraph (b) of subsection 1 to the Section,  
 27 and is submitting an update to the plan of water conservation, the supplier must  
 28 also submit to the Section:

29 (a) A comparison between the results of the new calculations and the  
 30 previous calculations; and

31 (b) An analysis of any progress made by the supplier towards the goals for  
 32 acceptable water loss established in the plan for water conservation pursuant to  
 33 paragraph (c) of subsection 1 of NRS 540.141.

34 4. The provisions of this section do not apply to a transient water system as  
 35 defined in NRS 617.135.

36 **Sec. 2.** NRS 540.121 is hereby amended to read as follows:  
 37 540.121 As used in NRS 540.121 to 540.151, inclusive, **and section 1 of this**  
 38 **act**, "supplier of water" includes, but is not limited to:

39 1. Any county, city, town, local improvement district, general improvement  
 40 district and water conservancy district;

41 2. Any water district, water system, water project or water planning and  
 42 advisory board created by a special act of the Legislature; and

43 3. Any other public or private entity,

1     ↳ that supplies water for municipal, industrial or domestic purposes. The term does  
2 not include a public utility required to adopt a plan of water conservation pursuant  
3 to NRS 704.662.

4     **Sec. 3.** NRS 540.141 is hereby amended to read as follows:

5     540.141 1. A plan or joint plan of water conservation submitted to the  
6 Section for review must include provisions relating to:

7     (a) Methods of public education to:

8         (1) Increase public awareness of the limited supply of water in this State  
9 and the need to conserve water.

10       (2) Encourage reduction in the size of lawns and encourage the use of  
11 plants that are adapted to arid and semiarid climates.

12     (b) Specific conservation measures required to meet the needs of the service  
13 area, including, but not limited to, any conservation measures required by law.

14     (c) The management of water to ~~f~~

15     ~~(1) Identify~~ *identify* and reduce ~~leakage~~ *water loss* in water supplies,  
16 inaccuracies in water meters and high pressure in water supplies ~~and~~, *which*  
17 *must include, without limitation:*

18     (1) *Goals for acceptable levels of leakage water loss in water supplies.*  
19 *Such goals may use the following performance indicators and analyses, without*  
20 *limitation:*

21         (I) *Infrastructure leakage water loss index;*

22         (II) *Water audit data validity score;*

23         (III) *Operational basic apparent losses;*

24         (IV) *Operational basic real losses; and*

25         (V) *Economic level of leakage water loss.*

26     (2) ~~Where~~ *A plan for which analyzes how the supplier of water will*  
27 *progress towards the goals established for the acceptable levels of leakage*  
28 *water loss.*

29     (d) *The management of water to, where* applicable, increase the reuse of  
30 effluent.

31     ~~(e)~~ (e) A contingency plan for drought conditions that ensures a supply of  
32 potable water.

33     ~~(e)~~ (f) A schedule for carrying out the plan or joint plan.

34     ~~(f)~~ (g) A plan for how the supplier of water will progress towards the  
35 installation of meters on all connections.

36     ~~(g)~~ (h) Standards for water efficiency for new development.

37     ~~(h)~~ (i) Tiered rate structures for the pricing of water to promote the  
38 conservation of water, including, without limitation, an estimate of the manner in  
39 which the tiered rate structure will impact the consumptive use of water.

40     ~~(i)~~ (j) Watering restrictions based on the time of day and the day of the week.

41     2. In addition to the requirements of subsection 1, a plan or joint plan of water  
42 conservation submitted to the Section for review by a supplier of water providing  
43 service for 500 or more connections must include provisions relating to:

44     (a) Measures to evaluate the effectiveness of the plan or joint plan.

45     (b) For each conservation measure specified in the plan or joint plan, an  
46 estimate of the amount of water that will be conserved each year as a result of the  
47 adoption of the plan or joint plan, stated in terms of gallons of water saved  
48 annually.

49     3. The Section shall review any plan or joint plan submitted to it within 120  
50 days after its submission and approve the plan if it is based on the climate and  
51 living conditions of the service area and complies with the requirements of this  
52 section.

1           4. The Chief may exempt wholesale water purveyors from the provisions of  
2 this section which do not reasonably apply to wholesale supply.

3           5. To the extent practicable, the State Engineer shall provide on the Internet  
4 website of the State Engineer a link to the plans and joint plans that are submitted  
5 for review. In carrying out the provisions of this subsection, the State Engineer is  
6 not responsible for ensuring, and is not liable for failing to ensure, that the plans  
7 and joint plans which are provided on the Internet website are accurate and current.

8           **Sec. 4.** NRS 278.582 is hereby amended to read as follows:

9           278.582 1. Each county and city shall include in its respective building code  
10 the requirements of this section. If a county or city has no building code, it shall  
11 adopt those requirements by ordinance and provide for their enforcement by its own  
12 officers or employees or through interlocal agreement by the officers or employees  
13 of another local government. Additionally, each county and city shall prohibit by  
14 ordinance the sale and installation of any plumbing fixture which does not meet the  
15 standards made applicable for the respective county or city pursuant to this section.

16           2. Except as otherwise provided in ~~subsections 3 and 4,~~ *subsection 6*, each  
17 residential, commercial or industrial structure on which construction begins on or  
18 after March 1, 1992, *and before March 1, 1993*, and each existing residential,  
19 commercial or industrial structure which is expanded or renovated on or after  
20 March 1, 1992, *and before March 1, 1993*, must incorporate the following minimal  
21 standards for plumbing fixtures:

22           (a) A toilet which uses water must not be installed unless its consumption of  
23 water does not exceed 3.5 gallons of water per flush.

24           (b) A shower apparatus which uses more than 3 gallons of water per minute  
25 must not be installed unless it is equipped with a device to reduce water  
26 consumption to 3 gallons of water or less per minute.

27           (c) Each faucet installed in a lavatory or kitchen must not allow water to flow  
28 at a rate greater than 3 gallons per minute.

29           (d) A urinal which continually flows or flushes water must not be installed.

30           3. Except as otherwise provided in subsection ~~4,~~ *6*, each residential,  
31 commercial or industrial structure on which construction begins on or after March  
32 1, 1993, *and before January 1, 2020*, and each existing residential, commercial or  
33 industrial structure which is expanded or renovated on or after March 1, 1993, *and*  
34 *before January 1, 2020*, must incorporate the following minimal standards for  
35 plumbing fixtures:

36           (a) A toilet which uses water must not be installed unless its consumption of  
37 water does not exceed 1.6 gallons of water per flush.

38           (b) A shower apparatus which uses more than 2.5 gallons of water per minute  
39 must not be installed unless it is equipped with a device to reduce water  
40 consumption to 2.5 gallons of water or less per minute.

41           (c) A urinal which uses water must not be installed unless its consumption of  
42 water does not exceed 1 gallon of water per flush.

43           (d) A toilet or urinal which employs a timing device or other mechanism to  
44 flush periodically, irrespective of demand, must not be installed.

45           (e) A urinal which continually flows or flushes water must not be installed.

46           (f) Each faucet installed in a lavatory or kitchen must not allow water to flow  
47 at a rate greater than 2.5 gallons per minute.

48           (g) Each faucet installed in a public restroom must contain a mechanism which  
49 closes the faucet automatically after a predetermined amount of water has flowed  
50 through the faucet. Multiple faucets that are activated from a single point must not  
51 be installed.

52           4. *Except as otherwise provided in subsection 6, each residential,*  
53 *commercial or industrial structure on which construction begins on or after*

1 *January 1, 2020, and each existing residential, commercial or industrial*  
 2 *structure which is expanded or renovated on or after January 1, 2020, must not*  
 3 *install any toilet, shower apparatus, urinal or faucet that has not been certified*  
 4 *under the WaterSense program established by the United States Environmental*  
 5 *Protection Agency.*

6 5. For the purposes of subsection 4 ~~f-e-f~~:

7 (a) A plumbing fixture is considered certified under the WaterSense program  
 8 if the fixture has been:

9 ~~f-e-f~~ (1) Tested by an accredited third-party certifying body or laboratory in  
 10 accordance with the United States Environmental Protection Agency's  
 11 WaterSense program or an analogous successor program;

12 ~~f-e-f~~ (2) Certified by the certifying body or laboratory as meeting the  
 13 performance and efficiency requirements of the WaterSense program or an  
 14 analogous successor program; and

15 ~~f-e-f~~ (3) Authorized by the WaterSense program or an analogous successor  
 16 program to use the WaterSense label or the label of an analogous successor  
 17 program.

18 (b) If the WaterSense program modifies the requirements for a plumbing  
 19 fixture to be certified under the WaterSense program, a plumbing fixture that  
 20 was certified under the previous requirements shall be deemed certified for use  
 21 under the WaterSense program for a period of 12 months following the  
 22 modification of the requirements for certification.

23 6. The requirements of this section for the installation of certain plumbing  
 24 fixtures do not apply to any portion of ~~f-e-f~~:

25 (a) An existing residential, commercial or industrial structure which is not  
 26 being expanded or renovated ~~f-e-f~~; or

27 (b) An existing residential, commercial or industrial structure if the structure  
 28 was constructed 50 years or more before the current year, regardless of whether  
 29 that structure has been expanded or renovated since its original construction.

30 **Sec. 5.** NRS 338.193 is hereby amended to read as follows:

31 338.193 1. Each public building sponsored or financed by a public body  
 32 must meet the standards made applicable for the building pursuant to this section.

33 2. Except as otherwise provided in ~~f-subsections 3 and 4,~~ *subsection 6*, each  
 34 public building, other than a prison or jail, on which construction begins on or after  
 35 March 1, 1992, *and before March 1, 1993*, and each existing public building which  
 36 is expanded or renovated on or after March 1, 1992, *and before March 1, 1993*,  
 37 must incorporate the following minimal standards for plumbing fixtures:

38 (a) A toilet which uses water must not be installed unless its consumption of  
 39 water does not exceed 3.5 gallons of water per flush.

40 (b) A shower apparatus which uses more than 3 gallons of water per minute  
 41 must not be installed unless it is equipped with a device to reduce water  
 42 consumption to 3 gallons of water or less per minute.

43 (c) Each faucet installed in a lavatory or kitchen must not allow water to flow  
 44 at a rate greater than 3 gallons per minute.

45 (d) A toilet or urinal which employs a timing device or other mechanism to  
 46 flush periodically irrespective of demand must not be installed.

47 3. Except as otherwise provided in subsection ~~f-4,~~ *6*, each public building,  
 48 other than a prison or jail, on which construction begins on or after March 1, 1993,  
 49 *and before January 1, 2020*, and each existing public building which is expanded  
 50 or renovated on or after March 1, 1993, *and before January 1, 2020*, must  
 51 incorporate the following minimal standards for plumbing fixtures:

52 (a) A toilet which uses water must not be installed unless its consumption of  
 53 water does not exceed 1.6 gallons of water per flush.

1 (b) A shower apparatus which uses more than 2.5 gallons of water per minute  
2 must not be installed unless it is equipped with a device to reduce water  
3 consumption to 2.5 gallons of water or less per minute.

4 (c) A urinal which uses water must not be installed unless its consumption of  
5 water does not exceed 1 gallon of water per flush.

6 (d) A toilet or urinal which employs a timing device or other mechanism to  
7 flush periodically, irrespective of demand, must not be installed.

8 (e) A urinal which continually flows or flushes water must not be installed.

9 (f) Each faucet installed in a lavatory or kitchen must not allow water to flow  
10 at a rate greater than 2.5 gallons per minute.

11 (g) Each faucet installed in a public restroom must contain a mechanism which  
12 closes the faucet automatically after a predetermined amount of water has flowed  
13 through the faucet. Multiple faucets that are activated from a single point must not  
14 be installed.

15 4. *Except as otherwise provided in subsection 6, each public building, other*  
16 *than a prison or jail, on which construction begins on or after January 1, 2020,*  
17 *and each existing public building which is expanded or renovated on or after*  
18 *January 1, 2020, must not install any toilet, shower apparatus, urinal or faucet*  
19 *that has not been certified under the WaterSense program established by the*  
20 *United States Environmental Protection Agency.*

21 5. *For the purposes of subsection 4, a plumbing fixture is considered*  
22 *certified under the WaterSense program if the fixture meets the requirements of*  
23 *paragraph (a) or (b) of subsection 5 of NRS 278.582.*

24 6. The requirements of this section for the installation of certain plumbing  
25 fixtures do not apply to any portion of ~~(a)~~ :

26 (a) An existing public building which is not being expanded or renovated.;  
27 or

28 (b) A public building if the public building was constructed 50 years or more  
29 before the current year, regardless of whether that public building has been  
30 expanded or renovated since its original construction.

31 **Sec. 6.** NRS 461.175 is hereby amended to read as follows:

32 461.175 1. ~~[Except as otherwise provided in subsection 2, each]~~ *Each*  
33 *manufactured building on which construction begins on or after March 1, 1992, and*  
34 *before March 1, 1993, must incorporate the following minimal standards for*  
35 *plumbing fixtures:*

36 (a) A toilet which uses water must not be installed unless its consumption of  
37 water does not exceed 3.5 gallons of water per flush.

38 (b) A shower apparatus which uses more than 3 gallons of water per minute  
39 must not be installed unless it is equipped with a device to reduce water  
40 consumption to 3 gallons of water or less per minute.

41 (c) Each faucet installed in a lavatory or kitchen must not allow water to flow  
42 at a rate greater than 3 gallons per minute.

43 2. Each manufactured building on which construction begins on or after  
44 March 1, 1993, *and before January 1, 2020,* must incorporate the following  
45 minimal standards for plumbing fixtures:

46 (a) A toilet which uses water must not be installed unless its consumption of  
47 water does not exceed 1.6 gallons of water per flush.

48 (b) A shower apparatus which uses more than 2.5 gallons of water per minute  
49 must not be installed unless it is equipped with a device to reduce water  
50 consumption to 2.5 gallons of water or less per minute.

51 (c) Each faucet installed in a lavatory or kitchen must not allow water to flow  
52 at a rate greater than 2.5 gallons per minute.



1           3. *Each manufactured building on which construction begins on or after*  
2 *January 1, 2020, must not install any toilet, shower apparatus, urinal or faucet*  
3 *that has not been certified under the WaterSense program established by the*  
4 *United States Environmental Protection Agency.*

5           4. *For the purposes of subsection 3, a plumbing fixture is considered*  
6 *certified under the WaterSense program if the fixture meets the requirements of*  
7 *paragraph (a) or (b) of subsection 5 of NRS 278.582.*

8           Sec. 7. NRS 489.706 is hereby amended to read as follows:

9           489.706 1. ~~[Except as otherwise provided in subsection 2, each]~~ *Each*  
10 *manufactured home or mobile home on which construction begins on or after*  
11 *March 1, 1992, and before March 1, 1993, must incorporate the following minimal*  
12 *standards for plumbing fixtures:*

13           (a) A toilet which uses water must not be installed unless its consumption of  
14 water does not exceed 3.5 gallons of water per flush.

15           (b) A shower apparatus which uses more than 3 gallons of water per minute  
16 must not be installed unless it is equipped with a device to reduce water  
17 consumption to 3 gallons of water or less per minute.

18           (c) Each faucet installed in a lavatory or kitchen must not allow water to flow  
19 at a rate greater than 3 gallons per minute.

20           2. Each manufactured home or mobile home on which construction begins on  
21 or after March 1, 1993, *and before January 1, 2020*, must incorporate the  
22 following minimal standards for plumbing fixtures:

23           (a) A toilet which uses water must not be installed unless its consumption of  
24 water does not exceed 1.6 gallons of water per flush.

25           (b) A shower apparatus which uses more than 2.5 gallons of water per minute  
26 must not be installed unless it is equipped with a device to reduce water  
27 consumption to 2.5 gallons of water or less per minute.

28           (c) Each faucet installed in a lavatory or kitchen must not allow water to flow  
29 at a rate greater than 2.5 gallons per minute.

30           3. *Each manufactured home or mobile home on which construction begins*  
31 *on or after January 1, 2020, must not install any toilet, shower apparatus, urinal*  
32 *or faucet that has not been certified under the WaterSense program established*  
33 *by the United States Environmental Protection Agency.*

34           4. *For the purposes of subsection 3, a plumbing fixture is considered*  
35 *certified under the WaterSense program if the fixture meets the requirements of*  
36 *paragraph (a) or (b) of subsection 5 of NRS 278.582.*

37           Sec. 8. Chapter 704 of NRS is hereby amended by adding thereto a new  
38 section to read as follows:

39           1. Except as otherwise provided in subsection 4, each public utility that is  
40 required to adopt or update a plan of water conservation in accordance with the  
41 provisions of NRS 704.662 and:

42           (a) Serves 3,300 persons or more must conduct a water loss audit in  
43 accordance with the methodology and software of the American Water Works  
44 Association for water loss auditing. The results of the water loss audit must be  
45 submitted by the public utility to the Commission with the plan of water  
46 conservation or update to the plan of water conservation, as applicable.

47           (b) Serves less than 3,300 persons must calculate the amount of water  
48 delivered by the supplier of water and the amount of water that was billed to  
49 customers of the supplier of water for each year. The calculations must be  
50 submitted by the public utility to the Commission with the plan for water  
51 conservation or update to the plan of water conservation, as applicable.

52           2. If the public utility has previously submitted the results of a water loss  
53 audit to the Commission pursuant to paragraph (a) of subsection 1, and is

1 submitting an update to the plan of water conservation, the public utility must  
 2 also submit to the Commission:

3 (a) A comparison between the results of the new water loss audit and the  
 4 previous water loss audit; and

5 (b) An analysis of any progress made by the public utility towards the goals  
 6 for acceptable water loss established in the plan for water conservation pursuant  
 7 to paragraph (c) of subsection 1 of NRS 704.6622.

8 3. If the public utility has previously submitted the results of the  
 9 calculations conducted pursuant to paragraph (b) of subsection 1 to the  
 10 Commission, and is submitting an update to the plan of water conservation, the  
 11 supplier must also submit to the Commission:

12 (a) A comparison between the results of the new calculations and the  
 13 previous calculations; and

14 (b) An analysis of any progress made by the public utility towards the goals  
 15 for acceptable water loss established in the plan for water conservation pursuant  
 16 to paragraph (c) of subsection 1 of NRS 704.6622.

17 4. The provisions of this section do not apply to a transient water system as  
 18 defined in NRS 617.135.

19 Sec. 9. NRS 704.6622 is hereby amended to read as follows:

20 704.6622 1. A plan of water conservation submitted to the Commission for  
 21 approval must include provisions relating to:

22 (a) Methods of public education to:

23 (1) Increase public awareness of the limited supply of water in this state  
 24 and the need to conserve water.

25 (2) Encourage reduction in the size of lawns and encourage the use of  
 26 plants that are adapted to arid and semiarid climates.

27 (b) Specific conservation measures required to meet the needs of the service  
 28 area, including, but not limited to, any conservation measures required by law.

29 (c) The management of water to ~~+~~

30 ~~(1) Identify~~ identify and reduce ~~leakage~~ water loss in water supplies,  
 31 inaccuracies in water meters and high pressure in water supplies ~~;~~ and ~~],~~ which  
 32 must include, without limitation:

33 (I) Goals for acceptable levels of water loss in water supplies. Such goals  
 34 may use the following performance indicators and analyses, without limitation:

35 (I) Infrastructure water loss index;

36 (II) Water audit data validity score;

37 (III) Operational basic apparent losses;

38 (IV) Operational basic real losses; and

39 (V) Economic level of water loss.

40 ~~(2) Increase~~ (2) A plan which analyzes how the public utility will progress  
 41 towards the goals established for the acceptable levels of water loss.

42 (d) The management of water to, where applicable, increase the reuse of  
 43 effluent.

44 ~~(d)~~ (e) A contingency plan for drought conditions that ensures a supply of  
 45 potable water.

46 ~~(e)~~ (f) A schedule for carrying out the plan.

47 ~~(f)~~ (g) A plan for how the public utility will progress towards the  
 48 installation of meters on all connections, if applicable.

49 (h) Standards for water efficiency for new development.

50 (i) Tiered rate structures for the pricing of water to promote the conservation  
 51 of water, including, without limitation, an estimate of the manner in which the  
 52 tiered rate structure will impact the consumptive use of water.

53 (j) Watering restrictions based on the time of day and the day of the week.

1 (k) Measures to evaluate the effectiveness of the plan.

2 2. A plan submitted for approval must be accompanied by an analysis of the  
3 feasibility of charging variable rates for the use of water to encourage the  
4 conservation of water.

5 3. The Commission shall review any plan submitted to it and approve the plan  
6 if it is based on the climate and living conditions of the service area and complies  
7 with the requirements of this section.

8 ~~[Sec. 8.]~~ **Sec. 10.** This act becomes effective:

9 1. Upon passage and approval for the purposes of adopting any regulations  
10 and performing any other preparatory administrative tasks that are necessary to  
11 carry out the provisions of this act; and

12 2. On January 1, 2020, for all other purposes.